

Fig. 1

Fig. 2

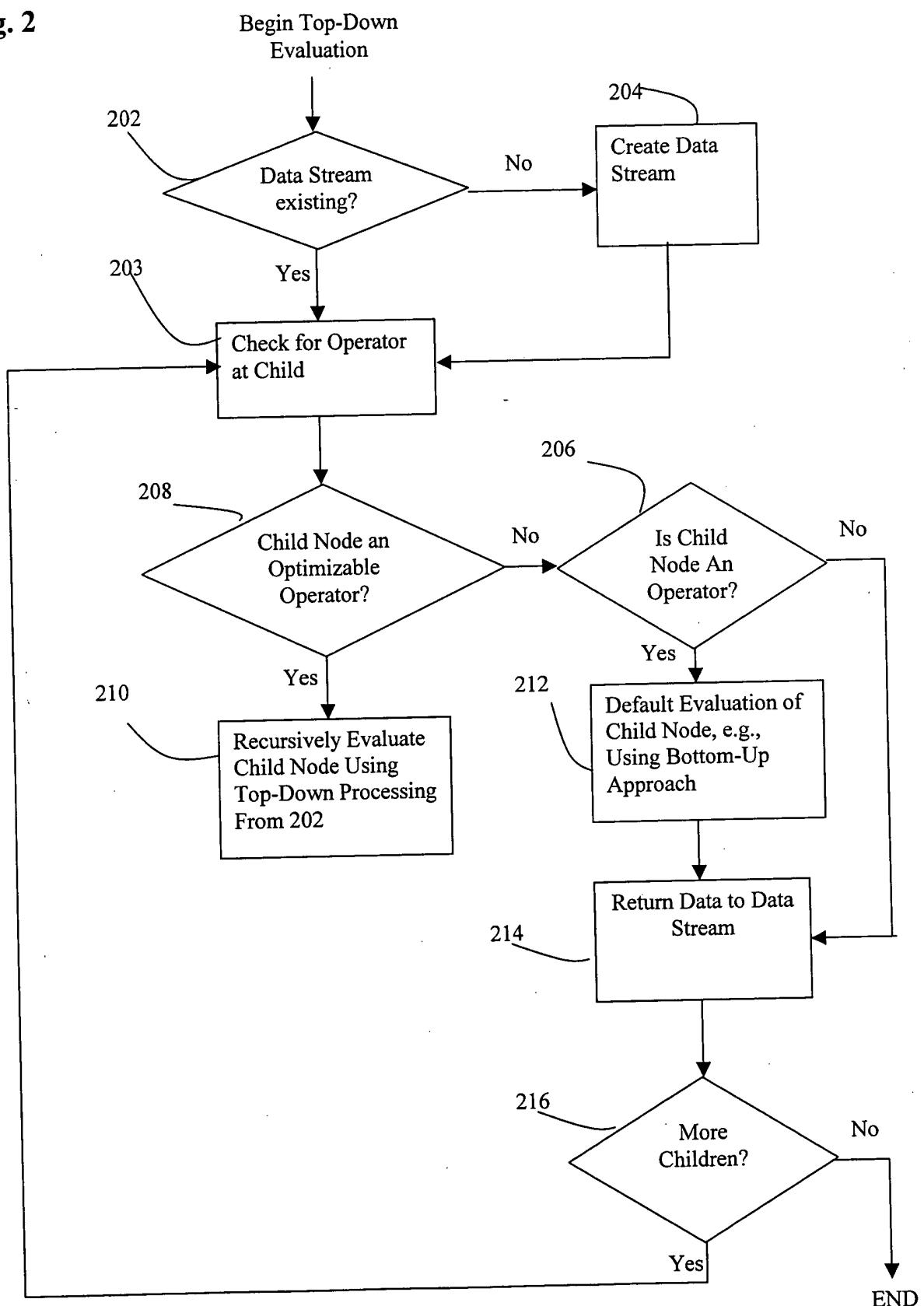
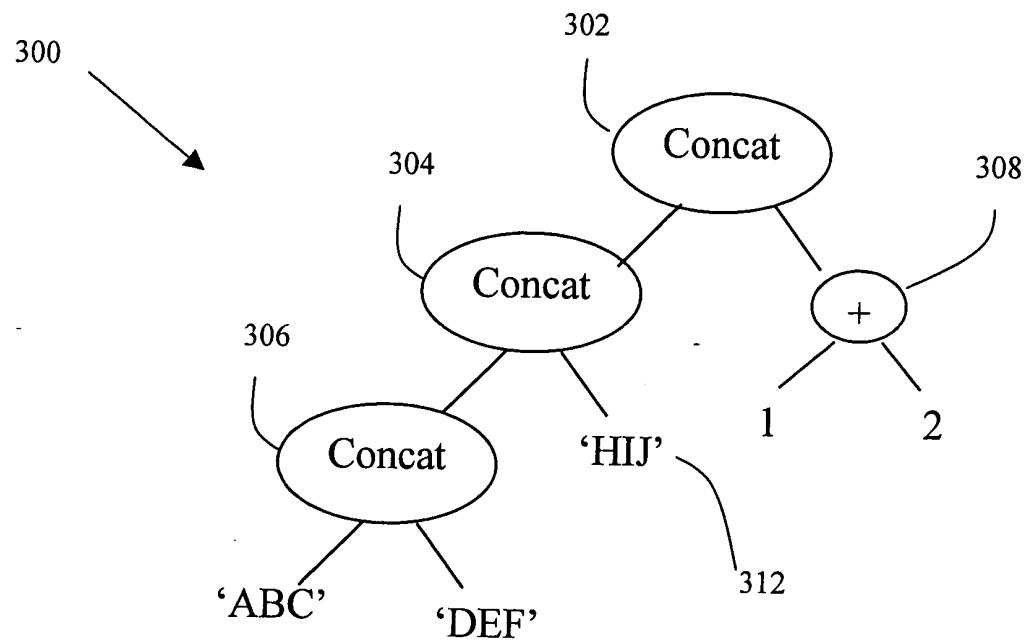


Fig. 3A



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Fig. 3B

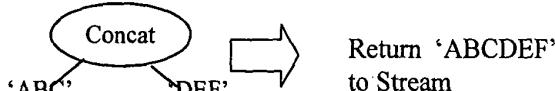
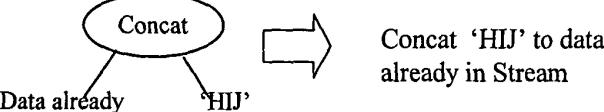
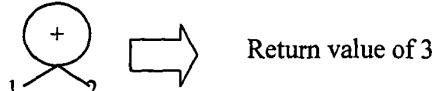
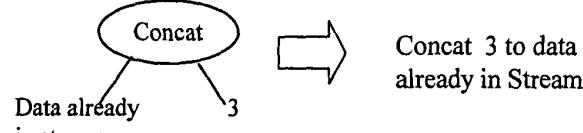
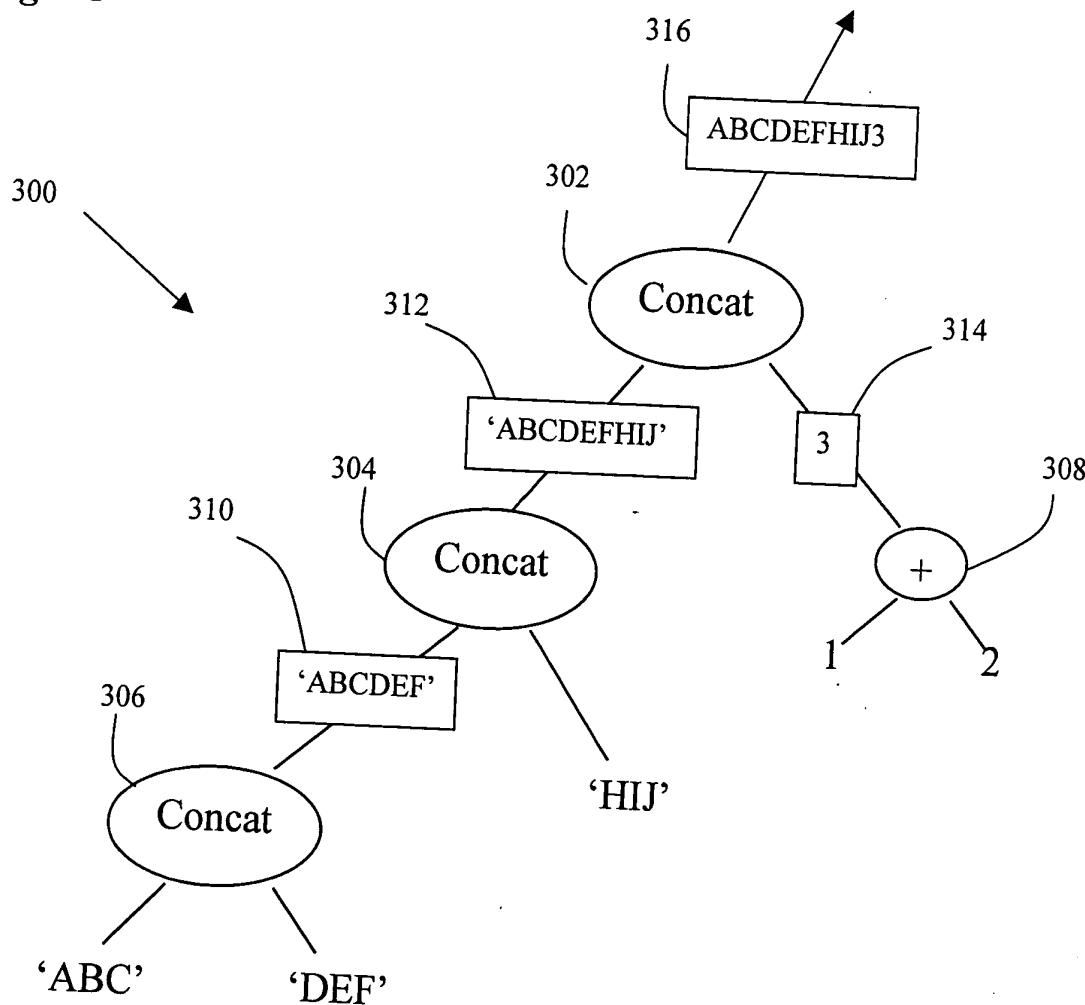
Node	Action
302	<ul style="list-style-type: none"> - One or more Child Operator Nodes? <p>Answer: Yes, at Node 304</p> <ul style="list-style-type: none"> - Child Operator Node 304 eligible for Top-Down Processing? <p>Answer: Yes</p> <p>Action: Proceed to Node 304 and Recursively begin process</p>
304	<ul style="list-style-type: none"> - One or more Child Operator Nodes? <p>Answer: Yes, at Node 306</p> <ul style="list-style-type: none"> - Child Operator Node 306 eligible for Top-Down Processing? <p>Answer: Yes</p> <p>Action: Proceed to Node 306 and Recursively begin process</p>
306	<ul style="list-style-type: none"> - One or more Child Operator Nodes? <p>Answer: No</p> <p>Action: Process Operation for Node 306 and return result to stream</p> <div style="text-align: center;">  </div> <p>Action: Return back to processing for Node 304</p>
304	<ul style="list-style-type: none"> - Any more Child Operator Nodes? <p>Answer: No</p> <p>Action: Process Operation for Node 304 and return result to stream</p> <div style="text-align: center;">  </div> <p>Action: Return back to processing for Node 302</p>
302	<ul style="list-style-type: none"> - Any more Child Operator Nodes? <p>Answer: Yes, at Node 308</p> <ul style="list-style-type: none"> - Child Operator Node 308 eligible for Top-Down Processing? <p>Answer: No</p> <p>Action: Proceed to Node 308 and Perform Bottom-Up Processing</p>
308	<p>Action: Process Operation for Node 308 and return result to Node 302</p> <div style="text-align: center;">  </div> <p>Action: Return back to processing for Node 302</p>
302	<p>Action: Finish Operation for Node 302 and return result to Stream</p> <div style="text-align: center;">  </div>

Fig. 3C



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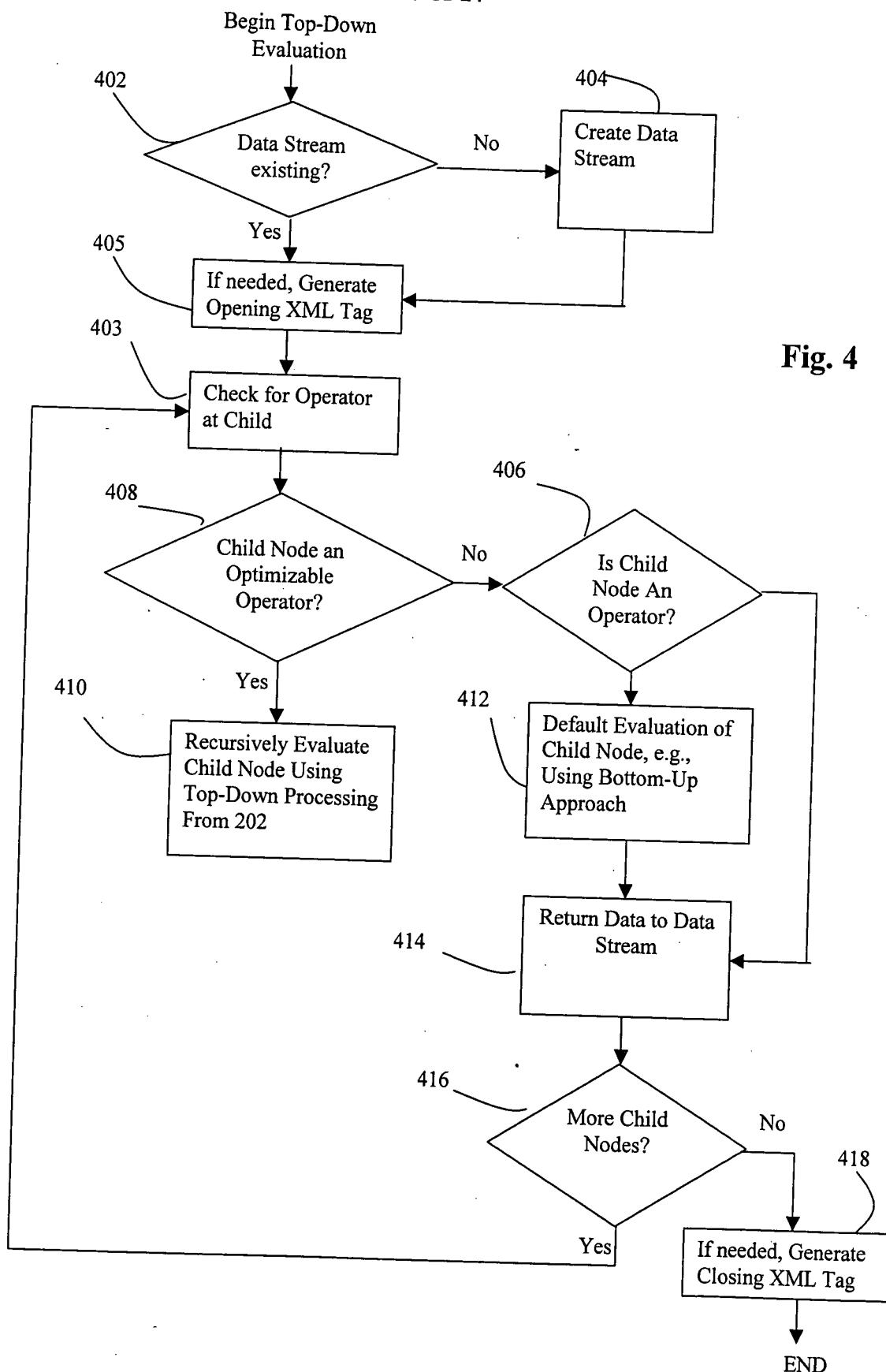


Fig. 4

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Fig. 5

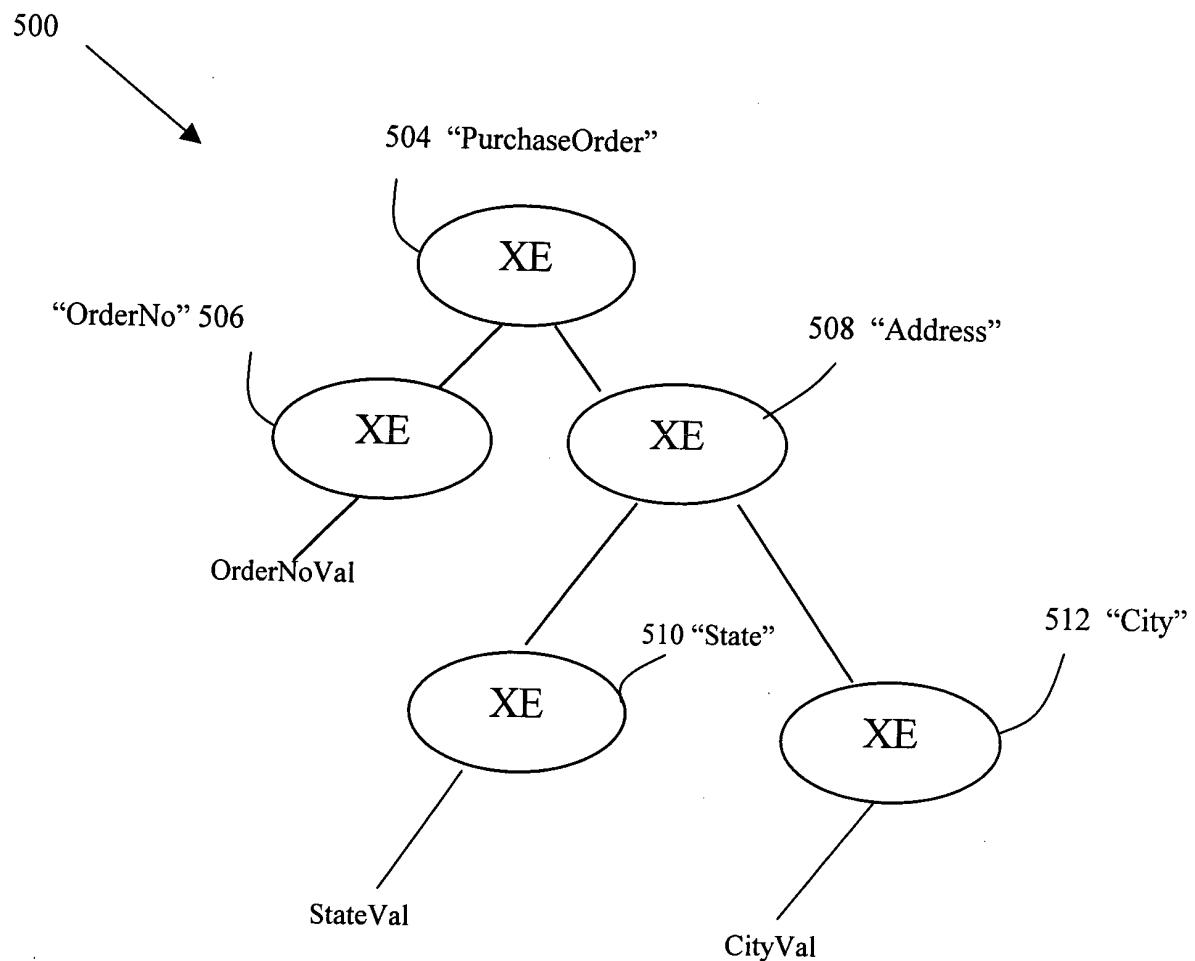
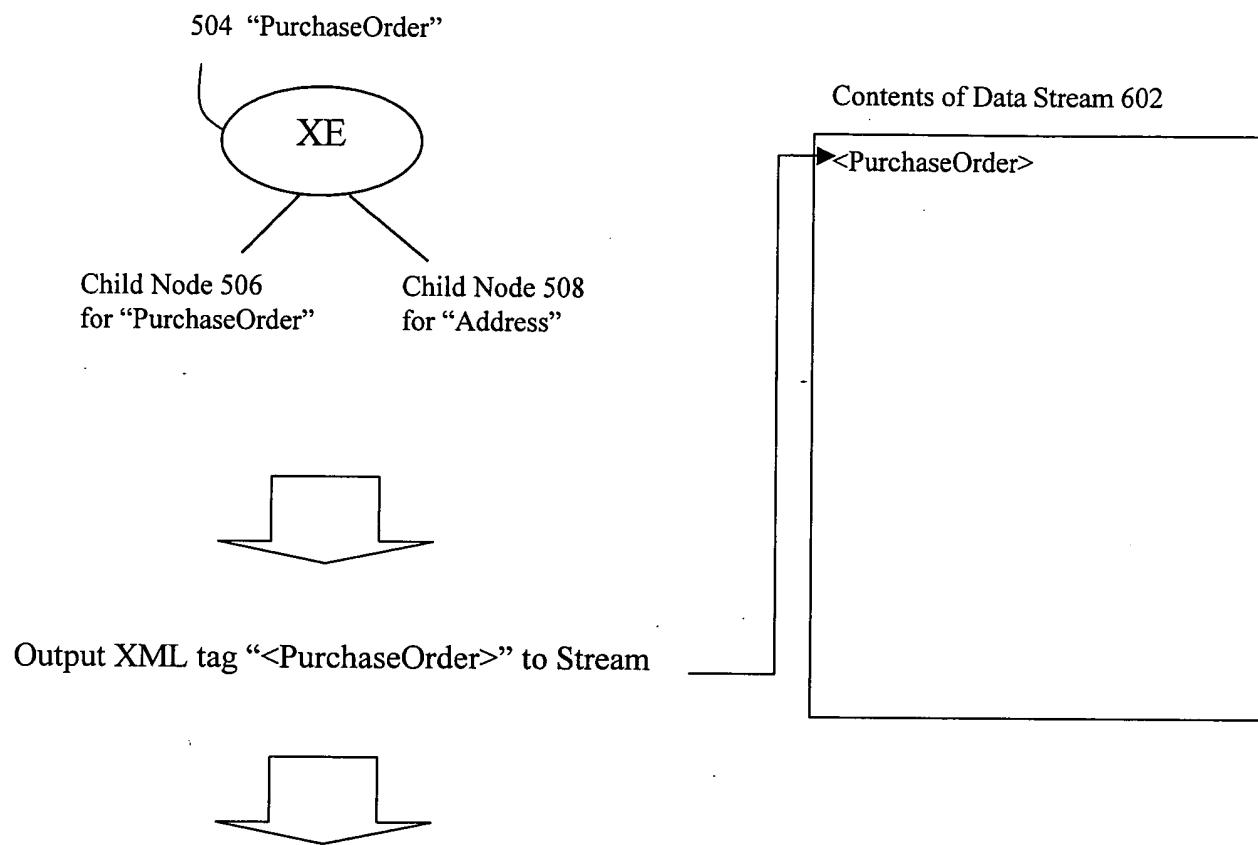


Fig. 6A

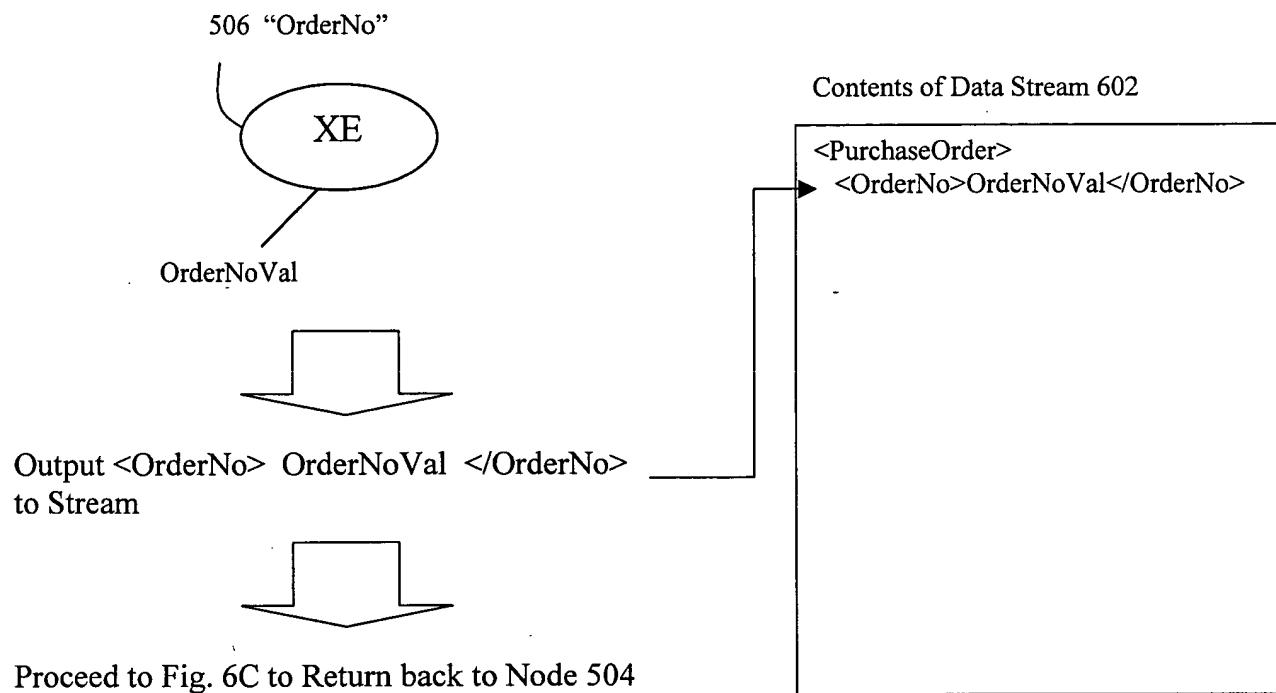
Begin Top Down Evaluation of Expression Tree 500



Proceed to Fig. 6B to Evaluate Child Node 506

Fig. 6B

Begin Evaluating Node 506 for “OrderNo”



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Fig. 6C

Return back to Node 504 to Continue Evaluating “PurchaseOrder”

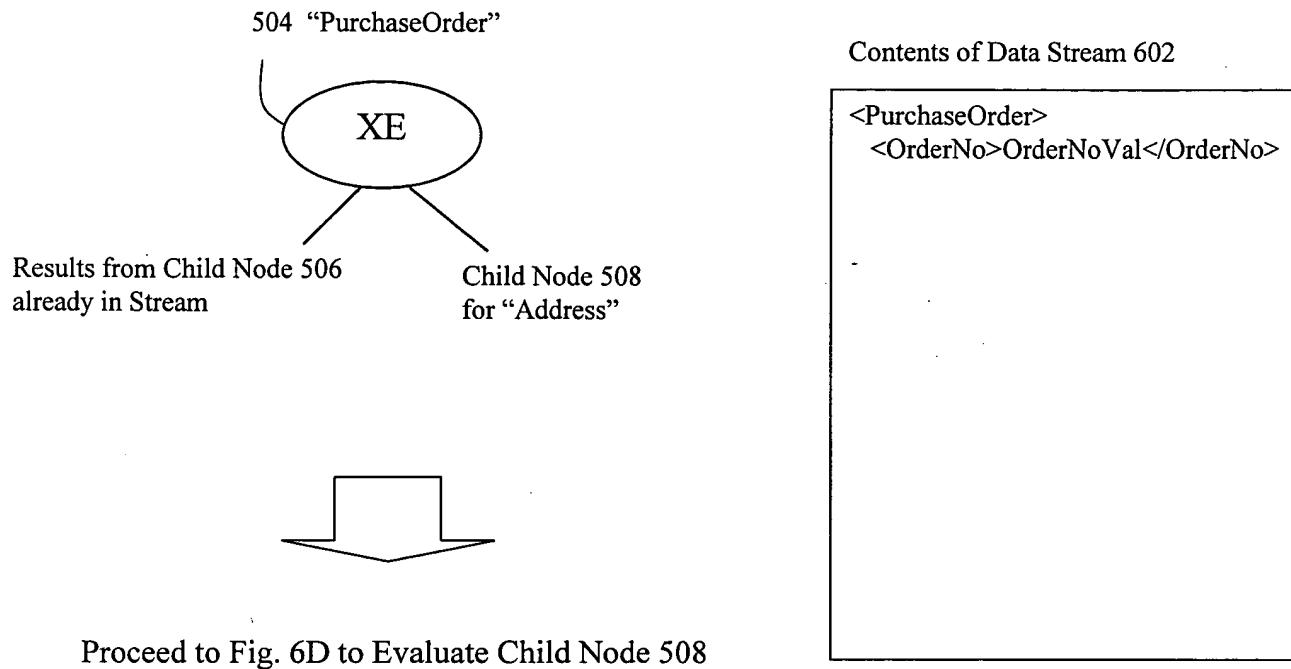
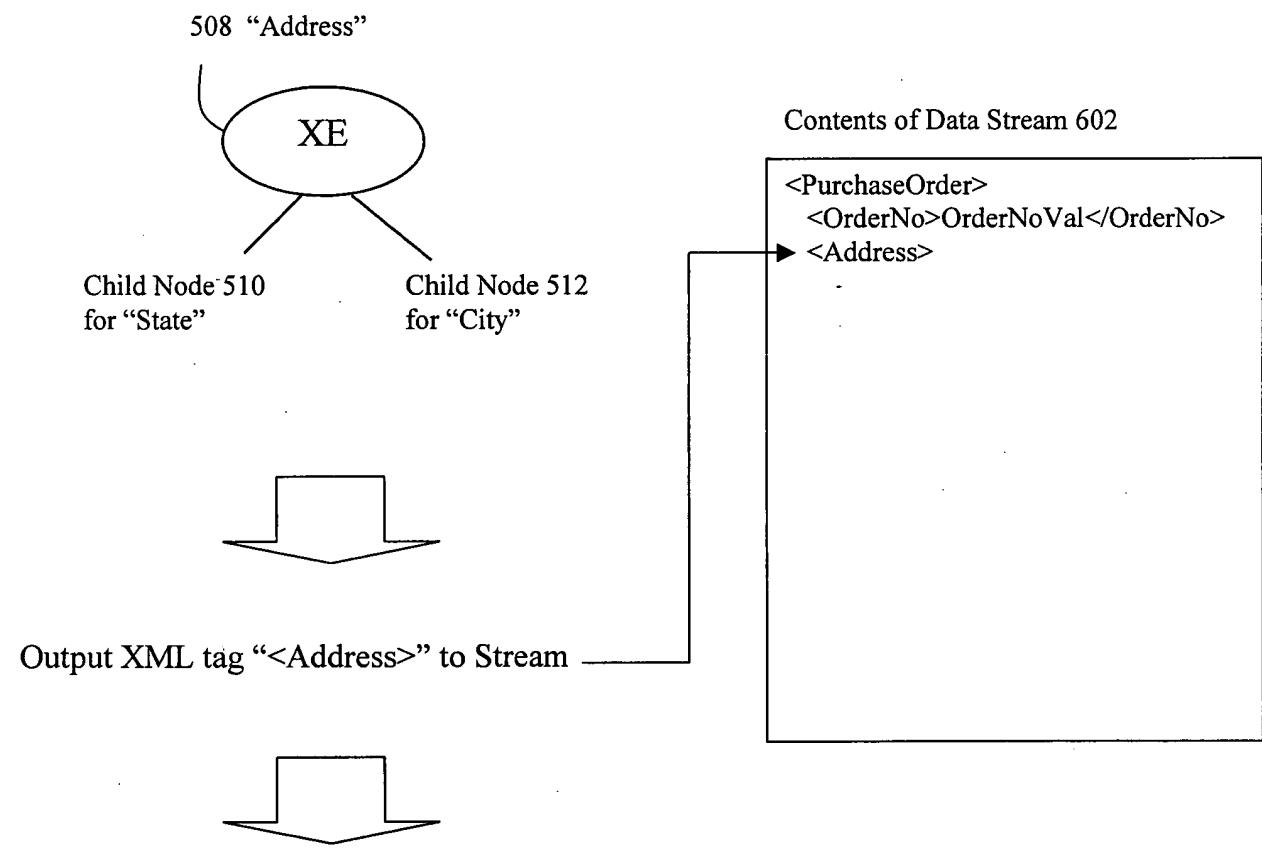


Fig. 6D

Begin Evaluating Node 508 for "Address"



Proceed to Fig. 6E to Evaluate Child Node 510

Fig. 6E

Begin Evaluating Node 510 for "State"

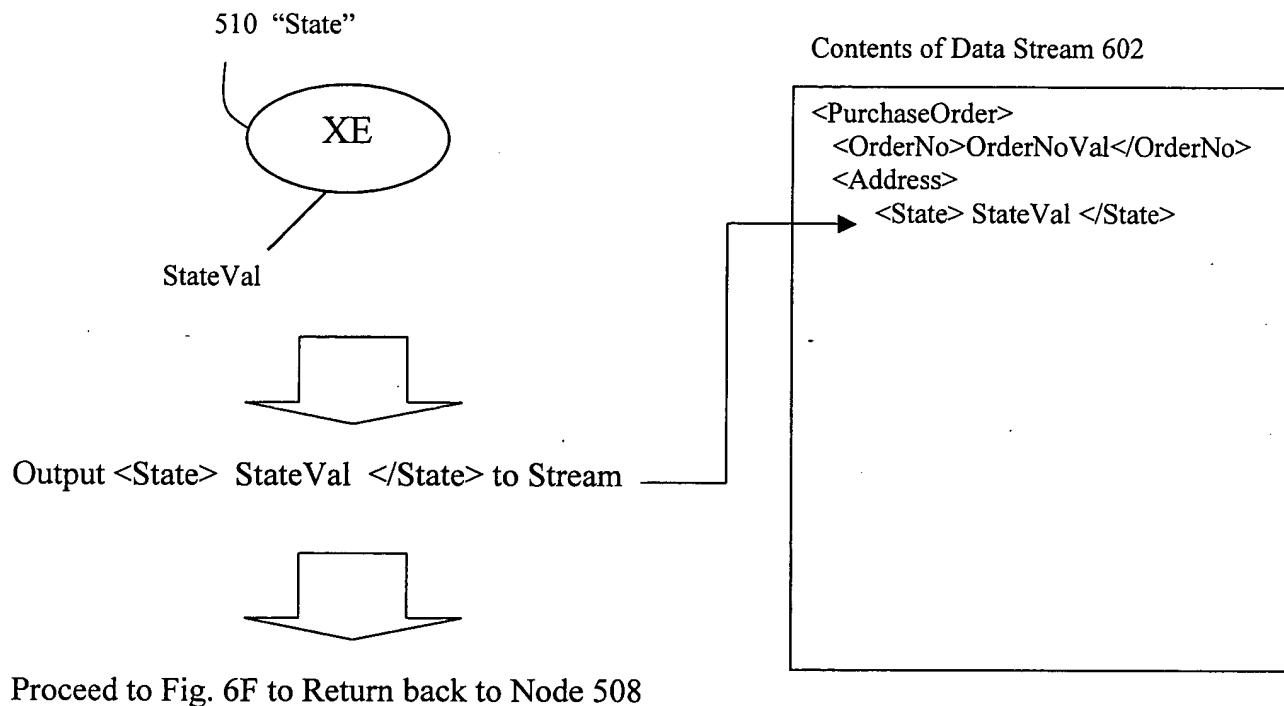
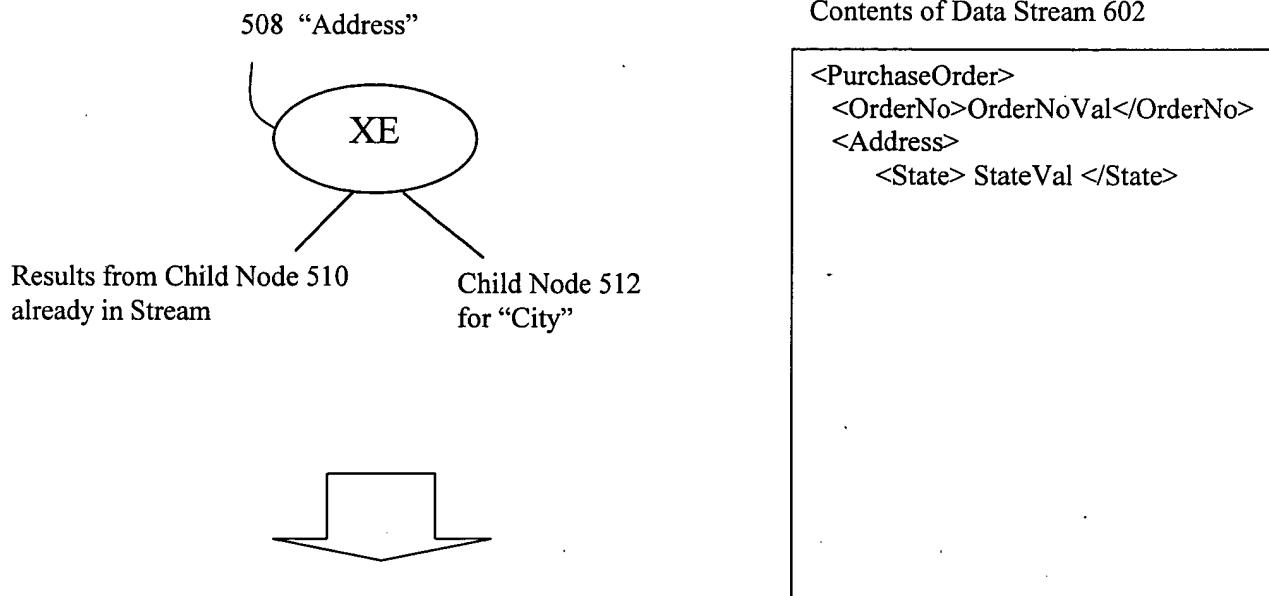


Fig. 6F

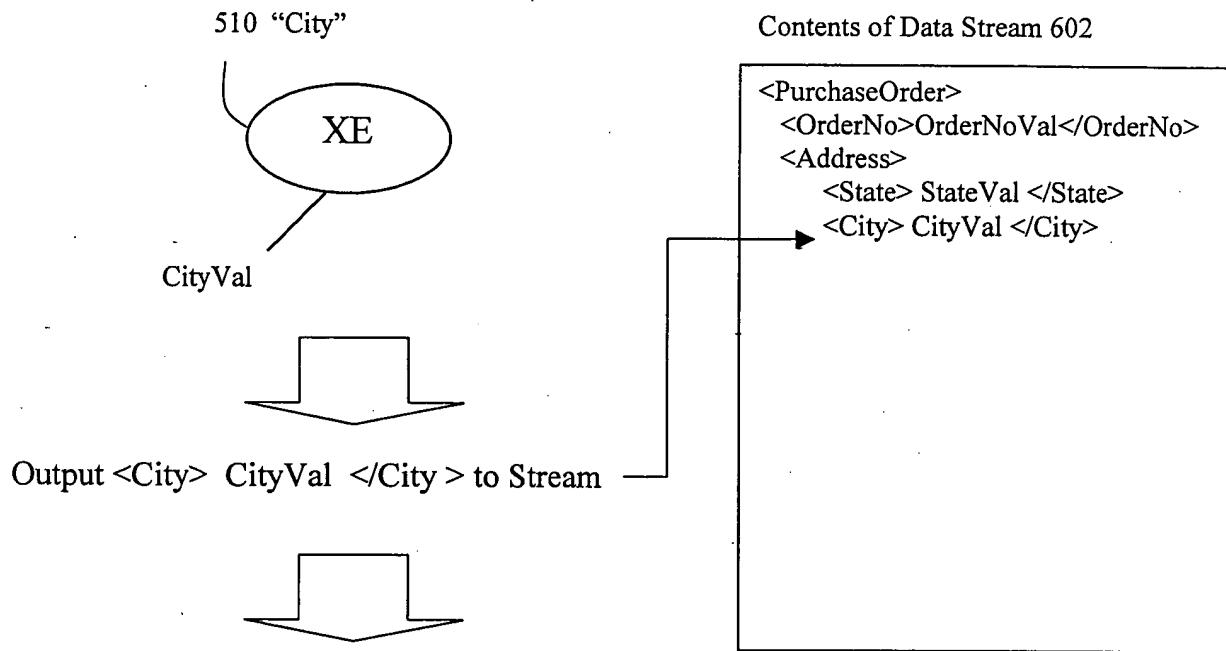
Return back to Node 508 for "Address"



Proceed to Fig. 6G to Evaluate Child Node 512

Fig. 6G

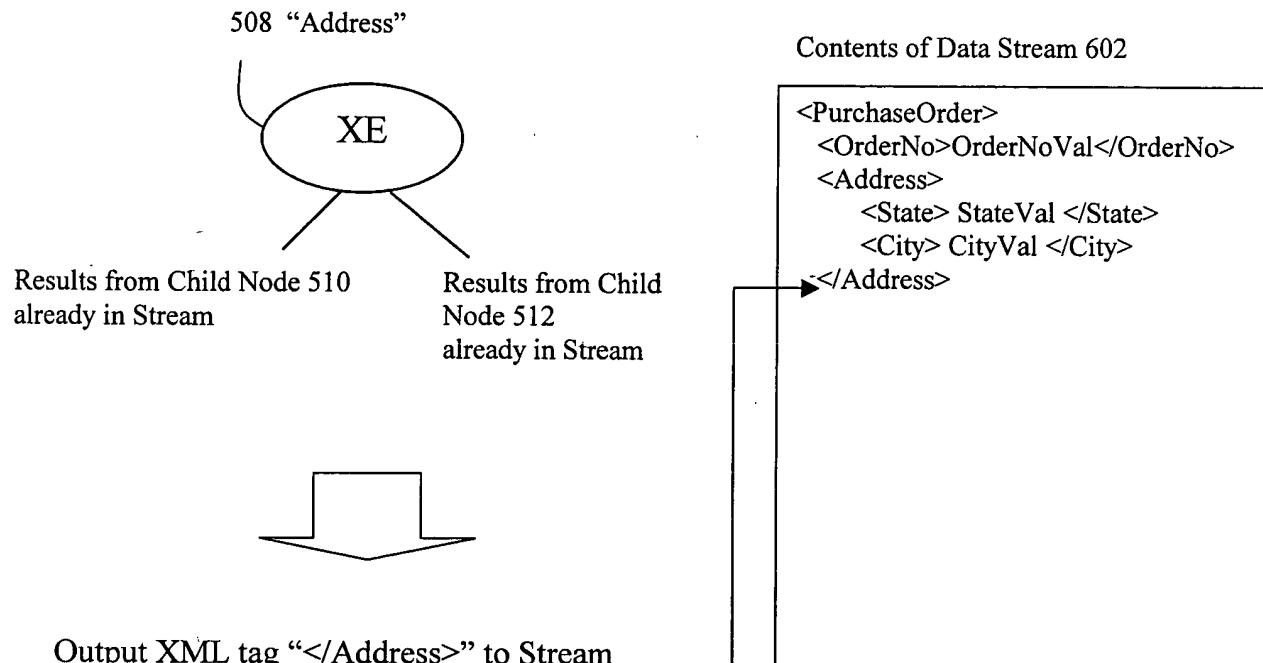
Begin Evaluating Node 512 for "City"



Proceed to Fig. 6H to Return back to Node 508

Fig. 6H

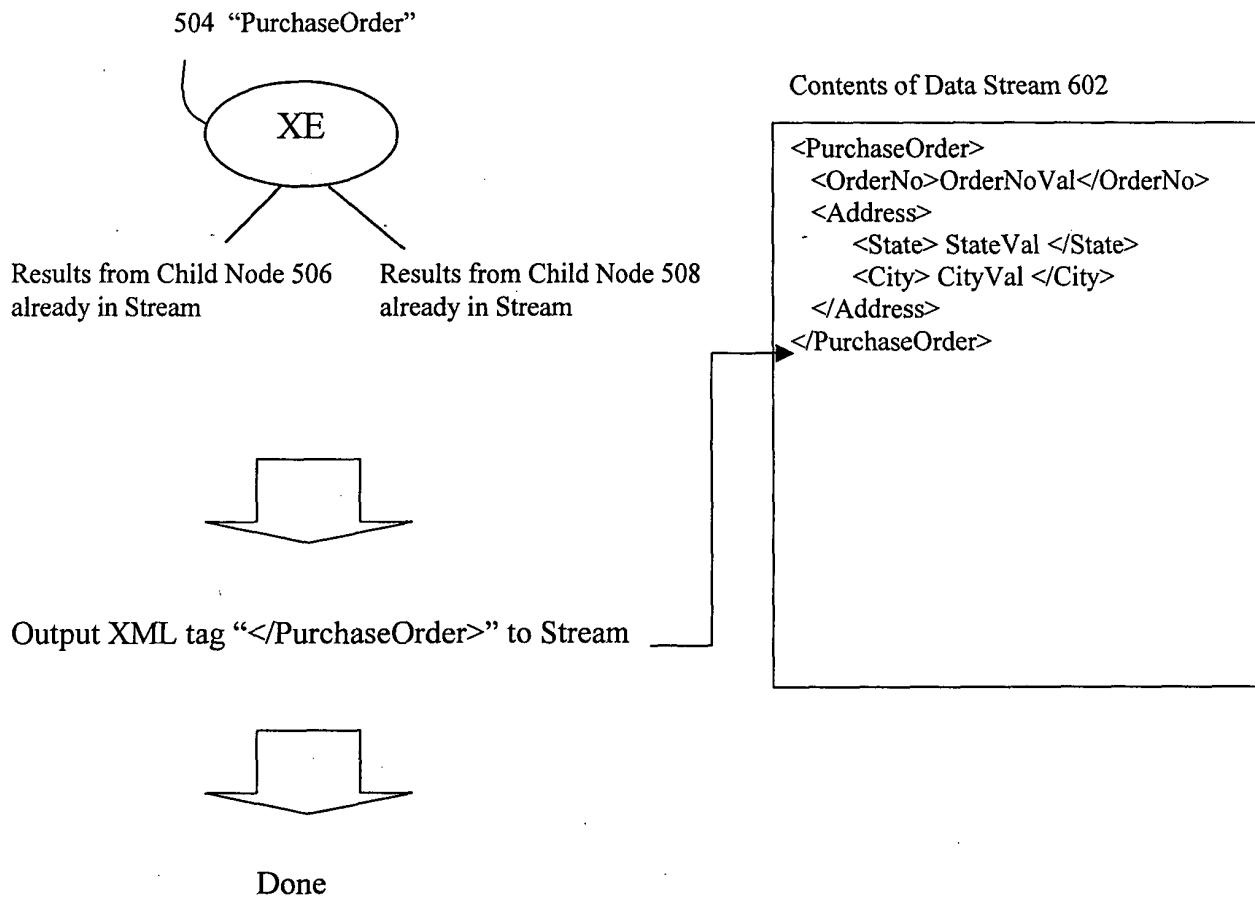
Finish Evaluating Node 508 for "Address"



Proceed to Fig. 6I to Return back to Node 504

Fig. 6I

Finish Top Down Evaluation of Expression Tree 500



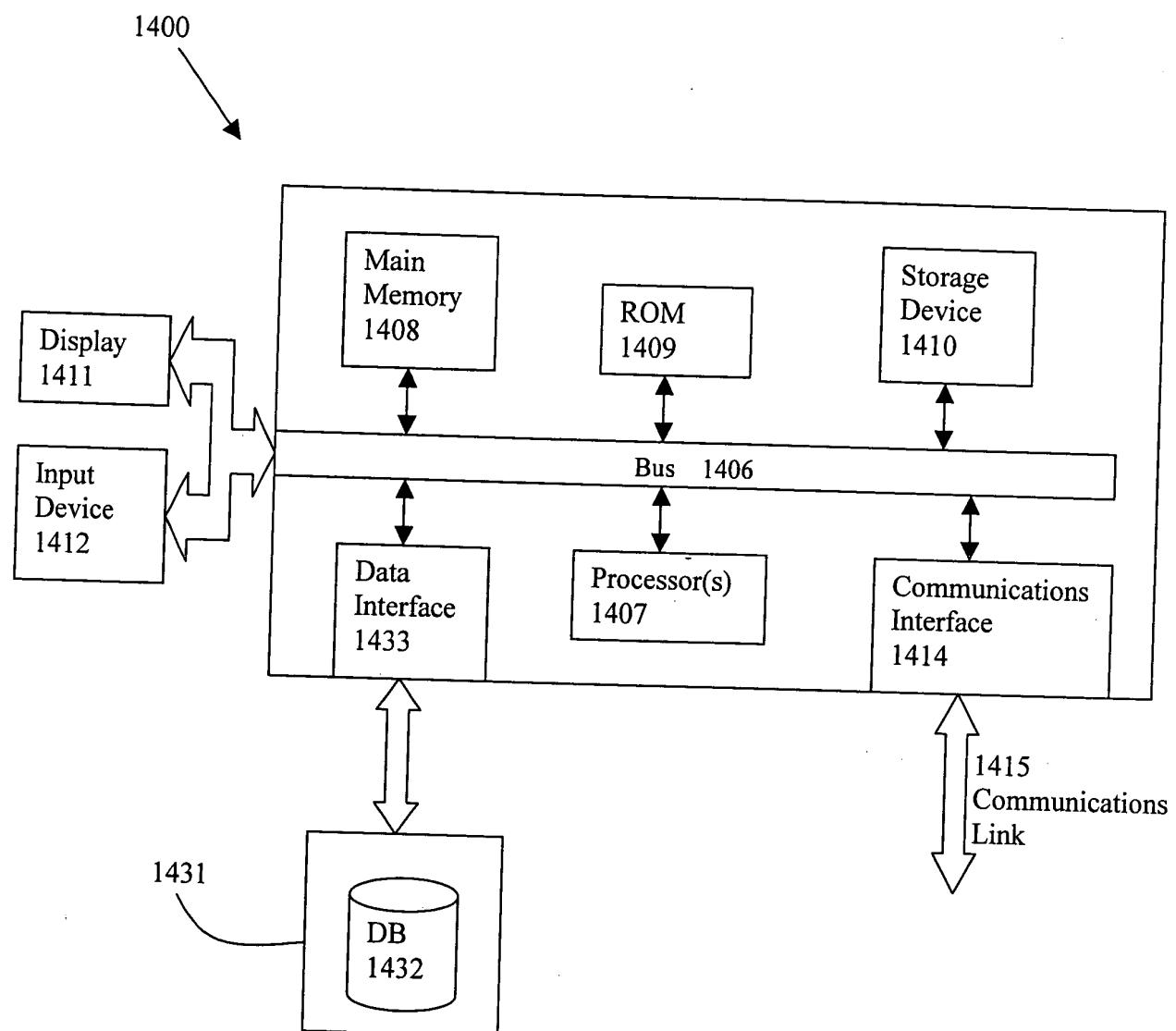


Fig. 7